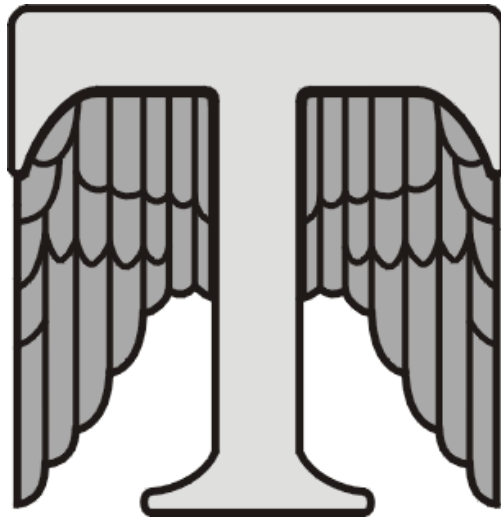


THETA DIGITAL



Prometheus

Owner's Manual

Vers 1.01

PREFACE

CONGRATULATIONS

You have just acquired one of the most advanced and versatile components for the amplification of audio ever developed.

IMPORTANT

Save all packaging in a dry place away from fire hazards. Your Prometheus is a precision electronic instrument and should be properly packaged any time shipment is made. In the unlikely event that you have to return your Prometheus to the factory or dealer for service or updating, the original packaging will best protect the unit from shipping damage.

In order to achieve the fullest flexibility and enjoyment from your Prometheus, we at Theta recommend that you read this manual in full before connecting the unit to your audio system.

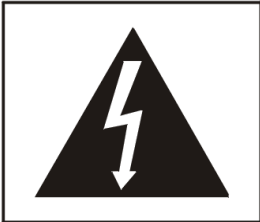
Note: It is imperative that Prometheus be operated in a well-ventilated environment and that the immediate external temperature be maintained as specified. Do not stack any equipment directly above, below or to the immediate sides of the Prometheus to protect it from overheating, as well as to protect the continued functionality of equipment near and around it.

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This manual is also available for download as a PDF file at Theta Digital's website. <http://www.thetadigital.com>. Check out the library.

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	CAUTION RISK OF ELECTRICAL SHOCK DO NOT OPEN	
CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL		



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of significant magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

WARNING

**TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE**

CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT USE THE AC (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

Extension cords are not recommended for use with this product.

Prometheus Identification Record

This information is for your records and for future identification of the Prometheus. Please take a moment to fill out all pertinent data now, and as upgrades and/or options are installed. **Whenever upgrades, inquiries and/or changes are requested, the serial number will be required.**

SERIAL NUMBER _____

DATE PURCHASED _____

DEALER'S NAME _____

DEALER'S ADDRESS/PHONE _____

INSTALLED CARDS/OPTIONS _____

(Date of installation)

(Date of installation)

(Date of installation)

(Date of installation)

SAFETY PRECAUTIONS

Please carefully read each item of the operating instructions and safety precautions before installing and using this product. Use extra care to follow the warnings written on the product itself and/or in the operating instructions. Keep the operating instructions and safety precautions for future reference.

CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE ANY OF THE COVER PANELS.

NO USER-SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT ALLOW LIQUIDS TO SPILL OR OBJECTS TO FALL INTO ANY OPENINGS OF THE PRODUCT.

THIS UNIT IS SUPPLIED WITH A 3 PIN GROUNDED AC PLUG. ALWAYS INSERT THE AC PLUG INTO A GROUNDED OUTLET. DO NOT REMOVE THE GROUND PIN OR DISABLE THE GROUND FOR ANY PURPOSE.

BEFORE MAKING ANY CONNECTIONS TO THE PROMETHEUS, FIRST TURN OFF THE POWER AND THEN DISCONNECT THE AC POWER CORD.

WHEN INSTALLING PROMETHEUS IN YOUR SYSTEM, MAKE CERTAIN TO ALLOW A MINIMUM OF 6 INCHES OF VENTILATION ON TOP AND ON EACH SIDE OF THE UNIT. IMPROPER VENTILATION OF THE UNIT MAY CAUSE OVERHEATING, WHICH MAY DAMAGE THE UNIT AND CAUSE A FIRE. PLACE THE UNIT ON A SOLID SURFACE ONLY. I.E. NOT ON CARPET, ETC.

DO NOT PLACE THE PROMETHEUS NEAR HEAT SOURCES SUCH AS DIRECT SUNLIGHT, STOVES, HEAT REGISTERS, RADIATORS OR OTHER HEAT PRODUCING EQUIPMENT.

TO PREVENT DAMAGE TO THE ANALOG OUTPUT CIRCUITRY, BE CERTAIN NOT TO SHORT THE OUTPUT SIGNAL TO GROUND. ENSURE THAT YOUR AUDIO OUTPUT CABLES DO NOT HAVE ANY INTERNAL SHORTS BEFORE CONNECTING THEM TO THE PROMETHEUS.

IF REPLACEMENT OF THE AC LINE FUSE AND/OR ANY INTERNAL/EXTERNAL FUSE BECOMES NECESSARY, REPLACE ONLY WITH SAME VALUE AND TYPE OF FUSE. NEVER BYPASS THE FUSE.

IF THE AC CORD BECOMES DAMAGED, DO NOT USE IT. IMMEDIATELY REPLACE IT WITH A NEW ONE OF THE SAME OR BETTER RATING.

IT IS IMPERATIVE THAT PROMETHEUS BE OPERATED IN A WELL VENTILATED ENVIRONMENT AND THE IMMEDIATE EXTERNAL TEMPERATURE BE MAINTAINED AS SPECIFIED. DO NOT STACK ANY EQUIPMENT DIRECTLY ABOVE, BELOW OR TO THE IMMEDIATE SIDES OF THE PROMETHEUS AS TO PROTECT IT FROM OVERHEATING, AS WELL AS THE CONTINUED FUNCTIONALITY OF ANY EQUIPMENT NEAR AND AROUND IT.

AFTER MARKET and THIRD PARTY MODIFICATIONS

Please note that any after market and/or third party modifications will void the warranty. In the case of changing the feet on a unit, in order to prevent any damage (which will also not be covered under warranty), please verify that the screws being used to secure non-Theta feet do not screw any deeper into the chassis than the original ones. The original screw is 1/4-20 by 1/2 and goes into the chassis 1/8 inch.

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INTRODUCTION

Getting to know your Prometheus

This Prometheus amplifier has been put through a rigorous and unique testing procedure that ensures that it will last for many years with minimal service requirements. This procedure includes the following:

- All assembled circuit boards are given a thorough visual inspection and are then tested in a bench-reference Prometheus.
- The tested, assembled circuit boards are then installed in a new Prometheus and the whole unit is tested for every function and parameter.
- The unit is put on a burn-in torture rack to test for any possible component failures.
- The Prometheus then undergoes a critical listening and functional test.
- The unit has all remaining chassis components installed and then undergoes a complete visual inspection, which assures that all Prometheus amplifiers meet visual specifications.

The front panel of the Prometheus is manufactured in two versions – a left and a right, as shown in figure 3. A left version has the tower on the right side of the faceplate and is intended to be placed on the left side of the room. Visa versa for the right. Should the user have a visual preference, the two sides may be reversed without effecting the audio performance.

Burn-In/Break-In Time

This unit has a break in period of about 1 week during which continuous improvement in sound quality will be observed. It is recommended that music be played continuously through the unit during this time to expedite the break in period.

Reference Manual Conventions

For clarity purposes, references to buttons and LED's will be shown in bold capital letters.

IMPORTANT NOTICE

- I. It is imperative that the Prometheus be connected to a ground via its three wire AC power cord. It is important that the AC power outlet, which the Prometheus is plugged into, is actually grounded. Failure to do so will severely compromise the performance, reliability and safety of use of the Prometheus.
- II. Ventilation is an important issue when placing the Prometheus in a system. Make certain that the Prometheus is placed in a well-ventilated area or rack unit. Heat must be dissipated and cool air must be allowed to enter the Prometheus.
- III. Please take note that some powerline conditioners defeat the AC power ground on their outlets. If the intention is to plug the Prometheus into a line conditioner, check with your dealer to make certain that the particular conditioner that is intended for use DOES NOT DEFEAT THE AC GROUND on its AC outlets. Only the highest powered line conditioners should be considered for use with the Prometheus. Otherwise, the amplifier's power output may be compromised.
- IV. DO NOT remove any cover panels from the Prometheus, as there are no user serviceable components inside. Refer servicing and updating to qualified service personnel only.
- V. Endcaps (**NOT** shorting plugs) on the unused RCA input will improve the sound quality and may reduce the susceptibility to RF induced anomalies.
- VI. It is imperative that the Prometheus be operated in a well ventilated environment and the immediate external temperature be maintained as specified in Appendix D of this manual. Do not stack any equipment directly above, below or to the sides of the Prometheus as to protect it from overheating, as well as the continued functionality of any equipment near and around it.

Front Panel Layout



Figure 2 - Front Panel Layout of a RIGHT Prometheus

- 1. Protect LED** Illuminates when Prometheus temperature rises above the maximum operating temperature and puts the amplifier into **STANDBY**.
- 2. Standby LED** Illuminates RED in **STANDBY**, GREEN during **TURN-ON** and BLUE for **NORMAL OPERATION**.
- 3. Standby Switch** After the rear panel **MAIN POWER** switch is turned on press the front panel button to exit the standby mode and enter the operational mode. Press again to return to **STANDBY**.



Figure 3 - Front Panels of LEFT and RIGHT Prometheus amps.

Rear Panel Layout

1. **SINGLE-ENDED** input jack.
1. **INPUT SELECT SWITCH:** In the UP position selects the RCA input. In the DOWN position selects the XLR input.
3. **BALANCED** input jack.
3. **BINDING POST (Cardas type).** Connect plus and minus speaker wires for one speaker to appropriately marked terminals of this post.
3. Second **BINDING POST.** This is used when Bi-Wiring a speaker. When Bi-Wiring, please be certain to remove the jumper between the woofer and high-frequency section of the loudspeaker.
6. **STANDBY REMOTE TRIGGER** jack. When the rear panel **STANDBY TRIGGER** jack receives a 5-12 VDC signal Prometheus will turn on. When the signal is removed, the amplifier will turn off.
7. **MAIN POWER** switch. Master power switch. Disconnects AC to all circuits. It is recommended that this be left ON at all times during regular use with the exception of whenever cables are connected/disconnected or when the unit is not going to be used for an extended period of time.
8. Main Power **FUSE.** If necessary, replace with same type and rating only.
9. Amplifier **AC POWER INPUT.**



Figure 4 – Rear Panel Layout

OPERATION

Before turning on Prometheus, ensure that all precautions and warnings have been carefully reviewed and adhered to. Damage to the Prometheus caused by improper operation, wiring and/or ventilation will not be covered under warranty and Theta will not be liable for any consequential damage or loss.

Connecting Prometheus

With the Prometheus' rear panel main power switch turned off, connect the signal outputs of the preamp/processor to either the single-ended or balanced input of the Prometheus. Connect the output to the input of the speaker that is intended to be driven. Please refer to figure 5.

Prometheus has a second binding post output connector. This may be connected to the second speaker input terminal on your loudspeaker system (if available). If using this second speaker input terminal, please be certain to remove the metal jumper between the woofer and high-frequency sections of your speaker.

Connect a 12V trigger source to the **STANDBY** trigger input of the Prometheus to enable remote turn-on and turn-off.

Setup and Operation

Turn the output volume of the preamp/processor, or other source device, down all of the way.

Turn on Prometheus **MAIN POWER** switch, located on the rear panel.

When first turning on the rear panel power switch, the red **STANDBY LED** on the front panel will illuminate, indicating that the Prometheus is in standby mode. When in standby, the amplifier draws less than 1 watt from the wall outlet.

Press the round standby button on the front panel to take the Prometheus out of standby. The **STANDBY LED** will turn from red to green during the turn-on process. When the amplifier is ready for operation, the LED will turn blue.

Slowly bring the output volume of the preamp/processor up to an audible level.

Remote Triggers

When the rear panel **STANDBY** trigger jack receives a 5-12 VDC signal, the Prometheus will change its state from standby to operate. When the signal is removed, the amplifier will return to **STANDBY**.

Appendix A Troubleshooting Guide

If the Prometheus should function abnormally during operation, please review the items in the following checklist. Please be sure to thoroughly check all other connected components such as speakers and preamplifiers, as well as cables. If the problem persists, please consult your dealer or distributor.

Symptom	Possible Cause(s)	Remedy
No power or front panel lights and no sound.	The power cable is not inserted 100% into AC input connector.	Ensure that the AC cord is inserted all the way into Prometheus and that the wall outlet is active.
	The rear panel fuse is open.	Replace with same type and rating ONLY.
	Circuit breaker is open (AC outlet).	Check the AC outlet circuit breaker and reset, if necessary, or contact your dealer.
No audio output.	Overheating, DC at output, Catastrophic failure	If the front panel PROTECT LED illuminates, the amplifier will shut down until it cools. In the unlikely event this occurs, an external fan may be necessary.
Cool/Warm	Normal operation	

Appendix B Wiring Diagram

This section provides an example illustration of an input and output wiring scheme. Before making any connections, please turn off ALL audio and video devices. Unplug those that do not have a main power switch. It is recommended that all cables, including speaker cables be kept as short as possible for best sound quality.



Figure 5 - Examples of Typical Input and Output Connections

APPENDIX D Specifications

Analog Audio Inputs

1 RCA Jack (Single-ended) 1 XLR Jack (Balanced input)	
Input Impedance	47 kOhms, Single-Ended or Balanced, for each phase
Input Sensitivity	(Single-Ended) 1.825V RMS input for 250W into 8 ohms.
	(Balanced) 1.825V RMS input for 250W into 8 ohms.
Gain	Single-Ended or Balanced: 27.8 dB
Polarity	(Single-Ended) Non-Inverting
	(Balanced) Pin-2 = Positive, Pin-3 = Negative for Non-Inverting Output

Analog Audio Outputs

2 balanced outputs	(Cardas Type standard) suitable for bi-wiring
Modes/Process	Standby: Amplifier is ready to turn on via front-panel switch or remote trigger
	Overcurrent, DC and/or Thermal Protection: Amplifier will cycle.
	Catastrophic DC or output stage failure: Amplifier will shutdown.
Power Output	8Ω: 250 W RMS with less than 0.01% THD, 20 Hz to 20 kHz; 300W RMS with less than 0.2% THD, 20 Hz-20 kHz; 350 W RMS with less than 1.0% THD at 1 kHz; 395 W RMS with less than 1% THD, 1 kHz, Burst mode
	4 Ω: 500 W RMS with less than 0.01% THD, 20 Hz to 20 kHz; 600 W RMS with less than 1.0% THD, 20 Hz to 20 kHz, 8 ohms; 800 W RMS with less than 1% THD, 1 kHz, Burst mode
	2 Ω: 850W RMS with less than 0.01% THD from 20 Hz to 20 kHz; 950W RMS with less than 1.0% THD, 20 Hz to 20 kHz, 8 ohms
Frequency Response	+0, -.5 dB, 0Hz to 20 kHz; load independent
Signal-to-Noise Ratio	124 dB referenced to rated output (A-Weighted)

Miscellaneous

Power Requirements	117VAC, 10A Slo-Blo Main fuse; 230VAC, 6A Slo-Blo main fuse, 50-60 Hz
Power Consumption	<1W @ Standby; 50W @ idle, 1440W Maximum
Trigger Input	5-12VDC, Steady State
Dimensions:	9 1/16" W x 13 7/8" H x 20" D (230 x 346 x 508 mm)
Weight:	54.5 lbs. (stand alone) (wr.6 kg)
	64 lbs. boxed with accessories (29.0 kg)
Maximum Operating Temperature	Internal: 176° F (80° C) Room: 131° F (55° C)

Specifications subject to change without prior notice.

90 DAY LIMITED WARRANTY TERMS AND CONDITIONS
(5-Year Optional Extended Service Contract)

1. Theta Digital division of Amplifier Technologies, Inc., henceforth referred to as Theta, warrants the product designated herein to be free of manufacturing defects in material and workmanship, subject to the conditions set forth herein, for a period of 90 days from the date of purchase by the original purchaser, henceforth referred to as purchaser. If the purchaser registers the unit with Theta by mailing in the warranty card, together with a copy of the bill of sale, within 14 days of the date of purchase, said purchaser will be registered for an extended service contract. The extended service contract extends the 90 days to a period of 5 years from the date of purchase by the original purchaser or no later than 7 years from the date of shipment to the authorized Theta dealer, whichever comes first.

2. **CONDITIONS**

This warranty is subject to the following conditions and limitations. The warranty is void and inapplicable if the product has been used or handled other than in accordance with the instructions in the owner's manual, abused or misused, damaged by accident or neglect or in being transported, or if the defect is due to the product being repaired or tampered with or modified by anyone other than Theta or an authorized Theta repair center. In the unlikely event that the unit requires service, contact Theta for an RA (Return Authorization) number. The product must be packed and returned to Theta or an authorized Theta repair center by the customer at his or her sole expense. Theta will pay return freight of its choice. A returned product must be accompanied by a written description of the defect, a photocopy of the original purchase receipt, and a daytime phone number where the owner can be reached. The unaltered receipt must clearly list model and serial number, the date of purchase, the name and address of the purchaser and authorized dealer and the purchase price. Theta reserves the right to modify the design of any product without obligation to purchasers of previously manufactured products and to change the prices or specifications of any product without notice or obligation to any person.

3. **REMEDY**

In the event the above product fails to meet the warranty and the above conditions have been met, the purchaser's sole remedy under the limited warranty shall be to obtain an RA number and return the product to Theta or an authorized Theta repair center where the defect will be rectified without charge for parts or labor.

4. **LIMITED TO ORIGINAL PURCHASER**

This warranty is for the sole benefit of the original purchaser of the covered product and shall not be transferred to a subsequent purchaser of the product.

5. **DURATION OF WARRANTY**

This warranty expires 90 days after the date of original purchase. If Theta receives the completed warranty registration card within 14 days of original purchase, this period is extended to the fifth anniversary of the original date of purchase or no later than the seventh anniversary of the shipment to the authorized Theta dealer, whichever comes first.

6. **MISCELLANEOUS**

ANY IMPLIED WARRANTIES RELATING TO THE ABOVE PRODUCT SHALL BE LIMITED TO THE DURATION OF THIS WARRANTY. THE WARRANTY DOES NOT EXTEND TO ANY INCIDENTAL OR CONSEQUENTIAL COSTS OR DAMAGES TO THE PURCHASER. Some states do not allow limitations on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

7. **WARRANTOR**

Inquiries regarding the above limited warranty may be sent to the following address:

Amplifier Technologies, Inc.
1749 Chapin Road
Montebello, CA 90640
USA

WARRANTY OUTSIDE THE USA

Theta has formal distribution in many of the countries of the world. In each country the Theta Importer has contractually accepted the responsibility for product warranty. Warranty service should normally be obtained from the importing dealer or distributor from whom you obtained your product.

WARNINGS

1. To prevent fire or shock hazard, do not expose your Theta product to rain or moisture.
2. This unit contains voltages which can cause serious injury or death. Do not operate with covers removed. Refer all servicing to your authorized Theta dealer or Distributor.
3. For continued protection against fire hazard, replace fuses only with the same type and rating of fuses as specified.